

**King County Family Treatment Court
Outcomes Evaluation Design**

Cost Benefit Evaluation Design

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A Transactional and Institutional Cost Analysis (TICA) approach to evaluating the Cost-Benefit Ratio of the King County Family Treatment Court

Overview of Approach and Methods

A cost-benefit evaluation calculates the cost of the program and also the cost of the outcomes, resulting in a cost-benefit ratio. For example, the cost of the program is compared to the avoided costs due to the reduction in re-arrests or days spent in foster care. In many adult drug court programs, it has been found that for every dollar spent on the program, over \$10 is saved due to positive outcomes.¹

A cost-benefit evaluation therefore requires the collection of outcome (or impact) data for court participants. These outcomes can include reduced time to permanency, reduced days spent in foster care, subsequent foster care reports or placements, reductions in parental criminal involvement, increases in employment and/or taxes paid, and reductions in cost of health services. In order to calculate benefits or avoided costs there must be time for outcomes to occur **after** program participation.

In order to have time for most of these outcomes to occur it is necessary to follow a court forward for several years so that, given a program length of about one year, at least one year of outcome data **after** program participation are available. The proposed design can accommodate this follow-up period if a one-year additional follow-up window is included after the enrollment of the last cohort of KCFTC participants.

In addition, in order to calculate benefits or the costs avoided, it is necessary to determine what the costs would have been if the court client had not participated in the specialty court program. The most scientifically accepted method for accomplishing this is to compare the outcomes for court participants to outcomes for similar court participants who did not participate in the specialty court (e.g., KCFTC). Ideally, this is accomplished by randomly assigning offenders to the specialty court versus processing through traditional dependency court. The option of randomized assignment to KCFTC versus regular dependency court has been proposed as an option in our Outcomes Evaluation Proposal. However, strong quasi-experimental designs, such as the one described in more detail in the proposal (and for which Washington State DSHS IRB approval has been obtained), can also provide adequate data for the cost-benefits analysis.

Transaction and Institutional Cost Analysis

NPC Research calls its cost-benefit methodology Transaction and Institutional Cost Analysis (TICA). NPC Research has performed many cost studies in the criminal justice setting (e.g., Carey and Finigan, 2003; Carey, et al., 2004, Crumpton and Finigan, 2003) using this approach, and has begun to apply this methodology to the family court process (Crumpton, Worcel, & Finigan, 2002). However, in contrast to the adult drug court setting, where numerous cost-benefit analyses have been conducted, thorough cost studies of the family treatment drug court (FTDC) model intervention, such as that undertaken in the KCFTC, are rare. In short, King County would be one of the first such studies in the country.

¹ See drug court cost-benefit studies at www.npcresearch.com.

The TICA approach views an individual's interaction with publicly funded agencies as a set of transactions in which the individual utilizes resources contributed from multiple agencies. Transactions are those points within a system where resources are consumed and/or change hands. In the case of the FTDC, when a participant appears in court or has a drug test, resources such as the judge's time, public defender time, caseworker time, court facilities, and urinalysis kits are used. Court appearances and drug tests are defined in this model as "transactions".

In addition, the TICA approach recognizes that for complex cross-system interventions such as the KCFTC, these transactions take place within multiple organizations and institutions that work together to create the program of interest. These organizations and institutions contribute to the cost of each transaction that occurs for program participants. TICA is an intuitively appropriate approach to conducting costs assessment in an environment such as KCFTC, which involves complex interactions among multiple taxpayer-funded organizations. Thus, one of the primary benefits of the TICA methodology is that it takes into account the costs associated with the resources invested by the multiple stakeholders who comprise the intervention (e.g., KCFTC); similarly, benefits are widely construed across constituent groups.

With TICA's focus on organizations and the linkages between these organizations in forming a FTDC, the researcher is provided with a unique ability to locate and gather comprehensive information on direct costs as well as indirect costs, such as support and overhead costs and examine costs and benefits for each agency that provides resources to the program.

Cost to the Taxpayer

In order to maximize the study's benefit to policy makers, a "cost-to-taxpayer" approach will be used for this evaluation. This focus helps define which cost data should be collected (costs and avoided costs involving public funds) and which cost data should be omitted from the analyses (e.g., costs to the individual participating in the program). In this approach, any related cost incurred by the KCFTC or comparison group participant that directly impacts a citizen (either through tax-related expenditures or the results of negative outcomes of the dependency court process) is used in the calculations.

Opportunity Resources

Finally, NPC's cost approach looks at publicly funded costs as "opportunity resources." The concept of opportunity *cost* from the economic literature suggests that system resources are available to be used in other contexts if they are not spent on a particular transaction. The term opportunity *resource* describes these resources that are now available for different use. For example, if substance abuse treatment reduces the number of times that a client is subsequently incarcerated, the local Sheriff may see no change in his or her budget, but an opportunity resource will be available to the Sheriff to further their public safety mission in the form of a jail bed that can now be filled by another person. In the context of the KCFTC, treatment and the specialty court process may reduce the length of the dependence process, and subsequent case worker, judicial, and other resources may be available. These opportunity resources will be calculated in the Cost-Benefit Analysis.

Cost Methodology

The TICA methodology is based upon six distinct steps. The table below lists each of these steps and the tasks involved. As can be seen, a number of the steps needed for the cost component of the study can be linked to the process and evaluation components previously described. Specific questions and data necessary for the cost component would thus be collected through existing ongoing activities of the evaluation team.

| Step | Description | Tasks |
|------|---|---|
| 1 | Determine flow/process (i.e., how clients move through the system) | <ul style="list-style-type: none"> • Site visits/direct observations of program practice • Interviews with key informants (agency and program staff) using program typology and cost guide |
| 2 | Identify the transactions that occur within this flow (i.e., where clients interact with the system) | <ul style="list-style-type: none"> • Analysis of process information gained in Step 1 |
| 3 | Identify the agencies involved in each transaction (e.g., court, treatment, DSHS social workers) | <ul style="list-style-type: none"> • Analysis of process information gained in Step 1 • Direct observation of program transactions |
| 4 | Determine the resources used by each agency for each transaction (e.g., amount of judge time per transaction, amount of attorney time per transaction, # of transactions) | <ul style="list-style-type: none"> • Administrative data collection of # of transactions (e.g., # of court appearance, # of treatment sessions, # of drug tests) • Interviews with program key informants using program typology and cost guide • Direct observation of program transactions |
| 5 | Determine the cost of the resources used by each agency for each transaction | <ul style="list-style-type: none"> • Interviews with budget and finance officers • Document review of agency budgets and other financial paperwork |
| 6 | Calculate cost results (e.g., cost per transaction, total cost of the program per participant) | <ul style="list-style-type: none"> • Support and overhead costs (as a percentage of direct costs) are added to the direct costs of each transaction to determine the cost per transaction. • The transaction cost is multiplied by the average number of transactions for program participants to determine the total average cost per transaction type • These total average costs per transaction type are added to determine the program and outcome costs. |

As the table above demonstrates, an understanding of the KCFTC process will be the first step in the cost-benefit analysis process. In order to understand and interpret the cost results it is

important to have a thorough understanding of the policies and procedures of the court. There are many ways to operationalize the court process and some ways are more cost-effective than others. A clear understanding of the KCFTC process will allow us to provide feedback on which practices are most cost efficient and which practices can be improved or enhanced. This information would be collected via the process evaluation component of the proposed evaluation protocol.

The following are some of the key transactions that will be important to include in the cost analysis:

- Integrated systems (e.g., integration of parental substance abuse treatment and continual review of progress within the traditional dependency court process);
- Early and efficient intervention (i.e., program eligibility determination, chemical dependency assessment, and treatment program enrollment will be completed within nine working days of the filing of a dependency petition);
- Comprehensive services (including detoxification, inpatient services, long-term treatment, recovery house, case management, intensive outpatient, opiate substitution treatment, therapeutic child care, mental health, health, housing assistance, and other services as needed by the parent and child);
- Increased judicial supervision (e.g., case review hearings occur every other week and become less frequent as the parent progresses through the program);
- A holistic approach to strengthening family functioning;
- Individualized case planning and management through the wraparound process;
- Ensuring legal rights, advocacy, and confidentiality;
- Reduced caseloads for DSHS case workers assigned to KCFTC-enrolled families;
- Regularly scheduled staffings and court reviews to improve coordination with the judge and among professionals serving the family;
- Graduated sanctions and incentives tied to reports of treatment progress and compliance with other court orders;

Outcome transactions would include the outcomes of interest such as reduced time to permanency, reduced time spent in foster care for concurrent and future placements, future CPS investigations and future court cases, reduced parental criminal involvement, etc. These outcomes are being collected as part of the proposed outcome evaluation. The frequency of each cost and outcome transaction would then be calculated per participant based on analysis of administrative and records data to determine final costs per program and participant, and to “cost” the outcomes achieved by participants and the program.

A Final Note: Comparison of TICA with WSIPP’s “The Comparative Costs and Benefits of Programs to Reduce Crime” Approach

Note: The following is based on a review of WSIPP’s cost-benefit analysis of Washington’s drug courts (2003).

- TICA is based on consideration of actual costs associated with actual outcomes of local program participants as compared to samples of similar non-program participants. WSIPP estimates outcomes and costs based on research in other parts of the country and therefore on “proxy” data regarding costs.
- WSIPP relies on analysis of state and national outcomes and cost data rather than data collected from the particular program under study and the cost environment within which it operates. TICA relies on collection and analysis of actual experience-based data from the program under study and from comparative program and “business as usual” conditions within its local service environment.
- TICA more fully takes into account local conditions and variation, as well as the specific transactional costs in a particular program setting.
- WSIPP cost analysis is generally based on gross, generalized agency cost and resource application information. TICA considers agency resource commitments and their cost consequences in considerably greater detail through extensive documentation of program processes and outcomes.

As a result, TICA captures more detail regarding interagency impacts and local variation. We believe that the TICA process will be more appropriate for the KCFTC Outcomes Evaluation, given the lack of well-developed research base on family treatment drug courts nationally. We also believe that it will yield a more accurate and nuanced estimate of the actual costs and cost savings accrued, which will stand up to greater scrutiny and make a greater contribution to the national literature on FTDCs.